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Brut. the resonant cavity having the Tm:YAG sample located substantially therein, and the source being arranged so that at least some of the radiation produced thereby is absorbed by the Tm:YAG sample, causing the Tm:YAG sample to emit radiation having a wavelength of about $2\ \mu\text{m}$.

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2 5. (Amended) A device according to Claim 1, comprising a source of pumping radiation for the Nd:YAG sample to stimulate the Nd:YAG sample to emit radiation having a wavelength of about $1\ \mu\text{m}$.

6. A device according to Claim 5, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of arrays of laser diodes.

7. A device according to Claim 5, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of flashlamps.

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G3 8. (Amended) A device according to Claim 1, wherein the Tm:YAG sample is substantially interposed between a second pair of members, at least one of which is substantially reflective to radiation having a wavelength of about $2\ \mu\text{m}$.

9. (Amended) A device according to Claim 8, wherein the second pair of members is located substantially within the resonant cavity.

10. A device according to Claim 1, wherein the device produces laser radiation having a wavelength of substantially $2.02\ \mu\text{m}$.

11. A device according to Claim 1, wherein the source of radiation having a wavelength of about $1\ \mu\text{m}$ is a source of radiation having a wavelength of substantially $1.064\ \mu\text{m}$.

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a4 12. (Amended) A method of producing laser radiation having a wavelength of about $2\ \mu\text{m}$, the method comprising the steps of:

- providing a Tm:YAG sample;
- providing a resonant cavity, the resonant cavity being composed of a Nd:YAG sample and a first pair of members that are substantially reflective to radiation having a wavelength of about $1\ \mu\text{m}$, the Nd:YAG sample being substantially interposed between the first pair of members;
- locating the Tm:YAG sample substantially within the resonant cavity; and
- emitting pumping radiation having a wavelength of about $1\ \mu\text{m}$ within the resonant cavity so

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cont.

that at least some of the radiation having a wavelength of about $1\mu\text{m}$ is absorbed by the Tm:YAG sample, causing the Tm:YAG sample to emit radiation having a wavelength of about $2\mu\text{m}$.

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16. (Amended) A method according to Claim 12, comprising the steps of:
providing a source of pumping radiation for the Nd:YAG sample; and
stimulating the Nd:YAG sample with the pumping radiation to cause the Nd:YAG sample to emit radiation having a wavelength of about $1\mu\text{m}$.

17. A method according to Claim 16, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of arrays of laser diodes.

18. A method according to Claim 16, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of flashlamps.

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19. (Amended) A method according to Claim 12, further comprising the steps of:
providing a second pair of members, at least one of which is substantially reflective to radiation having a wavelength of about $2\mu\text{m}$; and
interposing the Tm:YAG sample substantially between the second pair of members.

20. (Amended) A method according to Claim 19, further comprising the step of locating the second pair of members substantially within the resonant cavity.

21. A method according to Claim 12, wherein the method produces laser radiation having wavelength of substantially $2.02\mu\text{m}$.

22. A method according to Claim 12, wherein the step of emitting pumping radiation having a wavelength of about $1\mu\text{m}$ comprises the step of emitting pumping radiation having a wavelength of substantially $1.064\mu\text{m}$.

REMARKS

Claims 1, 5 – 12 and 16 – 22 are in the application. Reconsideration is respectfully requested.

Claim Rejections – 35 USC § 112, First Paragraph

Claims 3 and 14 were rejected as stated in paragraph 2 of the Detailed Action for lacking support in the specification. In reply, applicant notes that the language of now cancelled claim 3